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**AICTE Training and Learning (ATAL) Academy**

**Sponsored FDP**

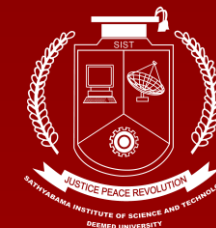
**ON**

**3D PRINTING AND  
ADDITIVE MANUFACTURING FOR  
INDUSTRIAL AND BIO MEDICAL APPLICATION**

**24<sup>th</sup> AUGUST to 28<sup>th</sup> AUGUST 2020**

**Organized By:**

**CENTRE OF EXCELLENCE FOR COLLABORATIVE PRODUCT  
DESIGN AND DEVELOPMENT (CPDD Centre)  
DEPARTMENT OF MECHANICAL ENGINEERING**



**SATHYABAMA**


**Institute of Science and Technology**

**(Deemed to be University)**

**Accredited with "A" grade by NAAC**

**CHENNAI, INDIA**

**[www.sathyabama.ac.in](http://www.sathyabama.ac.in)**



## About Sathyabama Institute of Science & Technology (Deemed to be University)


Sathyabama Institute of Science and Technology is one of South India's premier Academic and Research Universities that offers multi-disciplinary academic programmes in various fields of Engineering, Science, Technology, Management, Dentistry, Law and Nursing. It has been Accredited with 'A' Grade by the National Accreditation and Assessment Council (NAAC). Sathyabama's standing in rankings and ratings are excellent at National and International level. For the year 2020, Sathyabama Institute of Science and Technology has been ranked in 39<sup>th</sup> position among the Universities in India by the National Institutional Ranking Framework (NIRF), Government of India. NIRF has consistently ranked Sathyabama in the top 50 positions and this is the fifth consecutive year the Institution is receiving this recognition. Sathyabama Institute of Science and Technology is steered towards success under the leadership of Chancellor Dr. Mariazeena Johnson and President Dr. Marie Johnson. Sathyabama has undertaken various sponsored projects funded by both International & National organizations and also successfully conducted non-formal education programs through 18 village Resource Centers all over the state.

### About Department of Mechanical Engineering

The Mechanical Engineering Department, established in the year 1988 is one of the first departments in Sathyabama and has been offering B.E. degree programme in Mechanical Engineering, M.E. degree programmes and Ph.D Research programmes. The department has seen a tremendous growth over the last two decades with faculty members doing their doctoral research in various fields of Mechanical Engineering. The department has state of art laboratory facilities to give a wide exposure to the students for practical knowledge and hands on experience and also to cater the research needs of students and faculty members. In line with our policy of keeping abreast with the latest development, by the collective and responsive effort of the faculty the department conducts FDPs, workshops, symposia, National and International conferences.

### About ATAL FDP on 3D Printing

This Five-day faculty development program under the ATAL scheme of AICTE is designed in such a way that the participants will gain an idea about 3D printing and its applications in various fields. Handled by experts in the field of 3D printing, this FDP is sure to give participants the ability to handle different types of 3D printing technology in an application-oriented manner.



## Topics to be Covered

◆ Technology overview of additive and subtractive manufacturing.	◆ Model generation methods and CAD data processing techniques
◆ Additive manufacturing technologies	◆ Additive manufacturing processes, systems and materials
◆ Computational Geometry	◆ Additive manufacturing of precision components in plastics, metals, bio-materials and quality control issues.
◆ Reverse Engineering	◆ Aerospace, defense, Bio medical, automobile applications of additive manufacturing technologies
◆ Concurrent Engineering and DFM	
◆ Design for Additive Manufacturing	
◆ Recent advances and scope for research in rapid manufacturing technology	
◆ 3D printing in packaging – software	

### Course Outcome

- ◆ Enhance the effectiveness in prototyping creation for early stage design checking and post 3D design
- ◆ Able to handle different types of 3D printing technology; FDM and Polyjet, and apply in work.

### Eligibility

Faculties, Research Scholars & PG Scholars from AICTE approved Technical Institutions and Participants from Industry can apply.

### Certificate

Participants who attend the programme with minimum 80% attendance will be issued Certificate by the All India Council for Technical Education (AICTE) Training And Learning (ATAL) Academy, provided they score minimum 60% marks in the online test conducted at the end of the programme. The participants also have to provide Compulsory online Feed-back on the last day of FDP.

Registration is open at:  
[www.aicte-india.org/atal](http://www.aicte-india.org/atal)

**Registration FREE**

**Registration limited to 200**

**First Come First Serve basis**

### IMPORTANT DATES

**Last Date to Apply: 20.08.2020**

**Intimation of Selection: 21.08.2020**

**Confirmation by Participants: 22.08.2020**

# AICTE Training and Learning (ATAL) Academy Sponsored FDP on 3D PRINTING AND ADDITIVE MANUFACTURING FOR INDUSTRIAL AND BIO MEDICAL APPLICATION

**24<sup>th</sup> AUGUST to 28<sup>th</sup> AUGUST 2020**

## FDP SCHEDULE

24.08.2020 – 9.30 AM to 10.00 AM – Inauguration.

Inauguration Guest Speaker: **Dr. I.A.Palani** (Dean, R & D), IIT, Indore.

Date	10:00 AM to 11:30 AM	11.45 AM to 1.15 PM	2:00 PM to 3.30 PM
<b>24.08.2020 (Monday)</b>	<b>Session 1</b> <b>Dr P S Venkateswaran</b> National Technical Manager ARK info solutions Pvt Ltd., Chennai <b>Power of Digital Manufacturing for New Product Development</b>	<b>Session 2</b> <b>Mr. Rizwan</b> (Manager) Designtech System Pvt Limited <b>Additive Manufacturing Technologies for Innovative Product Development</b>	<b>Session 3</b> <b>Mr. Rizwan</b> (Manager) Designtech System Pvt Limited <b>Medical Application of 3 D Printer with STRATASYS Multi Material A M Technologies</b>
<b>25.08.2020 (Tuesday)</b>	<b>Session 4</b> <b>Dr. T. Rajasekaran</b> Professor, SRM University <b>State of the art 3 D Printing of Polymer Composites</b>	<b>Session 5</b> <b>Dr P S Venkateswaran</b> National Technical Manager ARK info solutions Pvt Ltd., Chennai <b>3D Printer with Medical Application</b>	<b>Session 6</b> <b>Dr P S Venkateswaran</b> National Technical Manager ARK info solutions Pvt Ltd., Chennai <b>3 D Printer (Virtual Demo)</b>
<b>26.08.2020 (Wednesday)</b>	<b>Session 7</b> <b>Dr. Ganesh Kumar Nithyanandam</b> Professor, PSG Tech <b>Usage of 3 D Printing in Industry 4.0</b>	<b>Session 8</b> <b>Mr. Prathap</b> (Manager) Designtech System Pvt Limited <b>Additive Manufacturing in Product Design and Manufacturing</b>	<b>Session 9</b> <b>Dr. Shiena Shekhar</b> , Professor, Bhilai Institute of Technology (BIT), Bhilai <b>Valuation of Surface Durability of Sand Casting Tooling for FDM Process</b>
<b>27.08.2020 (Thursday)</b>	<b>Session 10</b> <b>Mr. Daniel</b> (Director) Delta Rapid 3 D <b>Industrial 3D Printing - Additive Manufacturing Adaption in Aerospace, Defense &amp; Medical Tooling</b>	<b>Session 11</b> <b>Mr. Daniel</b> (Director) Delta Rapid 3 D <b>Industrial 3 D Printing - Additive Manufacturing Adaption in Education and R &amp; D</b>	<b>Session 12</b> (AICTE – Compulsory Session) <b>Dr. Janani Rex</b> Motivational Speaker <b>Emotional and Mental Development to Face the Current Phase</b>
<b>28.08.2020 (Friday)</b>	<b>Session 13</b> <b>Dr. I.A.Palani</b> (Dean R & D) IIT, Indore <b>Functional Materials for 3D Printing (Macro to Micro)</b>	<b>Session 14</b> <b>Mr PradeepKumar</b> Chief Consultant Engineer Zillion RPM Labs <b>Role of 3 D Printer in Pattern Making in Various Industries</b>	<b>Session 15</b> <b>Test and Feed Back Session</b>